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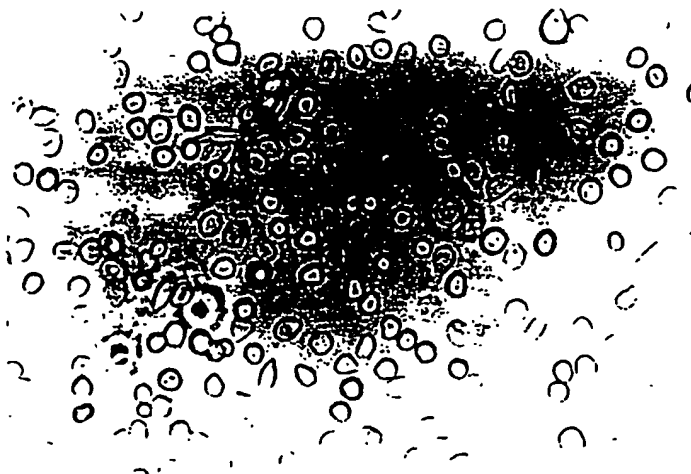
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60/137,740 2 June 1999 (02.06.1999) US</p> <p>(71) Applicant (for all designated States except US):
LIFEBANK SERVICES, L.L.C. [US/US]; 5108 Allan Road, Bethesda, MD 20816 (US).</p> <p>(72) Inventors; and</p> <p>(75) Inventors/Applicants (for US only): HU, Valerie, W. [US/US]; Rockville, MD (US). GOLDSTEIN, Allan, L. [US/US]; Washington, DC (US). WIGGINTON, Gordon [GB/GB]; Boreatton Hall, Baschurch, Shropshire</p> | <p>SY4 2EP (GB). PRESTIDGE, Peter, D. [GB/GB]; The Doctor's House, Tamworth-in-Arden, Warwickshire (GB). SACKIER, Jonathan, M. [US/US]; 985 Millwood Lane, Great Falls, VA 22066 (US).</p> <p>(74) Agents: GARRETT, Arthur, S. et al.; Finnegan, Henderson, Farabow, Garrett & Dunner, L.L.P., 1300 I Street, N.W., Washington, DC 20005-3315 (US).</p> <p>(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.</p> <p>(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).</p> |
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[Continued on next page]

(54) Title: METHODS OF ISOLATION, CRYOPRESERVATION, AND THERAPEUTIC USE OF HUMAN AMNIOTIC EPITHELIAL CELLS



Human amniotic epithelial cells just after isolation from amnion.

(57) Abstract: The present invention is directed to human amniotic epithelial cells derived from placenta at delivery, and the methods for isolating, culturing, and cryopreserving them for future therapeutic uses. Additionally, the present invention is directed to methods for inducing differentiation of these multipotentials cells, for assaying the cell types derived, and for manipulating the cells by gene transfection and other means for therapeutic applications, including but not limited to enzyme replacement and gene therapy, tissue regeneration and replacement, as well as burn and wound dressings.

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B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC 7 C12N A61K		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, PAJ, BIOSIS		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 333 328 A (GENETHICS LTD) 20 September 1989 (1989-09-20) cited in the application column 9, line 44 -column 12, line 2 column 24, line 35 -column 25, line 12; examples 1,2	1-7,61, 62,66
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<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C. <input checked="" type="checkbox"/> Patent family members are listed in annex.		
* Special categories of cited documents: <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> *A* document defining the general state of the art which is not considered to be of particular relevance *E* earlier document but published on or after the international filing date *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) *O* document referring to an oral disclosure, use, exhibition or other means *P* document published prior to the international filing date but later than the priority date claimed </div> <div style="width: 45%;"> *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. *&* document member of the same patent family </div> </div>		
Date of the actual completion of the international search <div style="text-align: center; font-weight: bold;">29 November 2000</div>		Date of mailing of the international search report <div style="text-align: center; font-weight: bold;">13/12/2000</div>
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fac. (+31-70) 340-3016		Authorized officer <div style="text-align: center; font-weight: bold;">Mateo Rosell, A.M.</div>

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